

ETFE Roof for the New Rheinparkhallen in Cologne

Since summer 2008, a highly transparent roof made of ETFE membranes arches over the atrium of the Cologne Rheinhallen. Since their construction in 1928, they have been considered the most modern exhibition halls of Germany and were converted now into an office block for the TV network RTL and the HDI-Gerling insurance company.



The 150 m long and 26 m wide light-flooded atrium splits the Rheinhallen into two halves along their North-South axis. The ETFE membrane roof arches over this atrium over the whole surface. It consists of five 26 by 30 meters large multi-layer membrane cushions. All around, the membranes are mounted to the steel structure by with aluminium profiles. The roof is given additional stability by a special rope structure which is used to arch the membrane cushion over the 26 m wide atrium. At intervals of 60 cm, the cushions are held in place by ropes tensioning them on top and from underneath. The ropes run in attached rope pockets. This filigree structure lends the approx. 4,000 sq.m large roof an extraordinary lightness.



Project data Rheinparkhallen Cologne

Customer	Hoch Tief Construction AG
Architect	HPP Hentrich-Petschnigg & Partner
Statics Membrane	form TL
Roofed surface	approx. 4.000 sq.m
Year build	2008

